

Abstract

A fiber optic gyroscope (FOG) including a depolarizer having substantially equal first and second fiber segments of polarization maintaining (PM) fiber coupled to a single mode (SM) fiber loop. The first PM fiber segment includes sections of fiber connected together via a splice having an angle from about 35° to 55° between major axes of polarization of the sections which it connects. Similarly, the second PM fiber segment includes sections of fiber connected together via a splice having an angle from about 35° to 55° between major axes of polarization of the sections which it connects. The length of each fiber section is chosen to maintain the thermal and mechanical symmetry of the SM fiber loop.